

subject. The author gives in this paper, an account (extracted from Dr. Ohaus' original record in the *Stettiner Entomologische Zeitung*, 1900, p. 164) of the family life of certain species of the *Passalidae*, which reads more like a fairytale than the sober record of a naturalist's study of insect economy; these observations of Dr. Ohaus have overthrown definitely the old theory that social life is unknown amongst beetles, and we are finding out that there is as much to be learnt from exhaustive and carefully organised study of the earlier stages of beetle life as there is in the study of the communities of the social hymenoptera. I have no hesitation in saying that Mr. Arrow's paper is one of the most noteworthy contributions made by British coleopterists to natural science during the past few years. In connection with this subject of stridulatory organs, Dr. Sharp published a note in the *Ent. Mo. Mag.*, vol. xl., p. 277, pointing out how an organ originally designed for a certain purpose, might, in course of time, be adapted for another.

The year has seen the issue of the latest "Catalogue of British Coleoptera," prepared by Mr. Donisthorpe and the writer, and following in its arrangement of families and genera that adopted by Canon Fowler in his "British Coleoptera." Mr. Newbery made (*Ent. Record*, vol. xvi., p. 204) some comments on the rarer and doubtful species in this list, to which the authors of the catalogue replied (p. 289).

The concluding section of vol. 5 of M. Bedel's work *Faune des Coleoptères du Bassin de la Seine*, has become available to British coleopterists; this completes the section *Phytophaga*. Every British coleopterist, who desires to become something more than a mere collector, should possess this work; the low price at which it is issued puts it within the reach of every one, and no satisfactory work can be done at our beetle fauna without constant reference to the pages of M. Bedel's book, and to the works of Herr Ganglbauer and those of others of the leading continental coleopterists.

The year has again been one of progress, and of promise for the future, especially as several of our younger recruits seem bent on doing something better than merely walking in the footsteps of those who have gone before, and are devoting themselves to the study of the life-history of beetles and to other equally fascinating and neglected branches of the study. May 1905, at its close, present an equally good record and an equally good prospect of advance.

Types of the genera of the Agdistid, Alucitid and Orneodid plume moths.

By J. W. TUTT, F.E.S.

Meyrick and other authors have, during the past few years, made considerable changes in the nomenclature of the Agdistid, Alucitid and Orneodid moths, many of which appear to be sound, whilst others seem to be unwarranted by the literature of the subject. As it has become imperative for me to study the literature relating to this group, I beg to offer a few facts as to the names, and should be glad of any criticism, privately, as to the details here published.

1758. *ALUCITA*, Linné.—Restricted by Scopoli, in 1777, to the long-legged plumes (thus excluding *Orneodes*). Type fixed as *pentadactyla* by Leske in 1779. [In Walsingham and Durrant's opinion the type was fixed as *pentadactyla* by Poda in 1761.]

[15 February 1905]

1762. *PTEROPHORUS*, Geoffroy.—Created for same species as *Alucita*, Linné. Type fixed as *pentadactyla* by Geoffroy in 1762. Falls as a synonym of *Alucita*, having same conception and same type.

1796. *ORNEODES*, Latreille.—Created by Latreille for the plumes, with "many feathers" in the wings. Type fixed by Latreille, in 1802, as *hexadactyla*.

1806. *RIPIDOPHORA*, Hübner.—Type fixed by Hübner, in 1806, as *hexadactyla*, therefore falls as a synonym of *Orneodes*, Latr.

1806. *PTEROPHORA*, Hübner.—Type fixed by Hübner, in 1806, as *pentadactyla*, therefore falls as a synonym of *Alucita*.

1825. *AGDISTIS*, Hübner.—Created by Hübner, for *adactyla*, which is therefore the type.

1825. *PLATYPTILIA*, Hübner.—Restricted by various authors to the true *Platyptiliids* as now understood. Type never having been fixed, is now named as *gonodactyla* (= *megadactyla*, Hb.).

1825. *AMPLYPTILIA*, Hübner.—Evidently, from the plural form used, a misprint for *Amblyptilia*. Restricted by Zeller to *acanthodactyla*, Hb., and *cosmodactyla*, Hb. Type fixed, in 1862, by Wallengren as *acanthodactyla*.

1822. *STENOPTILIA*, Hübner.—Restricted by Meyrick and others to the "*pterodactyla* (*fuscus*)" and "*bipunctidactyla*" groups. The type never having been fixed, is now named as *pterodactyla* (= *ptilodactyla*, Hb.).

1825. *ACIPTILIA*, Hübner.—This is a synonym of *Pterophora*, Hb., 1806, since it contains *pentadactyla*, Hübner's type of the latter genus. It falls with *Pterophora* as a synonym of *Alucita*.

1825. *EUCHIRADIA*, Hübner.—Contains *hexadactyla*, type of Hübner's *Ripidophora*, which he omits in 1825. It, therefore, falls before *Ripidophora*, with which it sinks as a synonym of *Orneodes*.

1838. *ADACTYLUS*, Curtis.—Type stated by Curtis to be *huebneri* (= *adactyla*, Hb.), of which he only knew the figure. All the characters of the genus are described from, and the genus is founded on, the newly-described *bennetii*, which must be considered the type.

1841. *PLATYPTILUS*, Zeller.—Created as an extension of *Platyptilia*, Hb., to include, in addition to species of latter genus, a part of Hübner's *Amblyptilia*. Type fixed now as *gonodactyla*, so that it falls as a synonym of *Platyptilia*, Hb.

1841. *OXYPTILUS*, Zeller.—Created by Zeller for the *Oxyptilid* section of Hübner's *Amblyptilia*. Type now fixed as *pilosellae*, Zeller.

1841. *ACIPTILUS*, Zeller.—Created by Zeller as an extension of Hübner's *Aciptilia*. Type now fixed as *pentadactyla*, so that it falls with *Aciptilia* as a synonym of *Alucita*.

1852. *DIACROTRICHA*, Zeller.—Created for *fasciola*, which is therefore the type.

1852. *DEUTEROCOPUS*, Zeller.—Created by Zeller for *tengstroemi*, Zell., which is therefore the type.

1862. *CNEMIDOPHORUS*, Wallengren.—Created by Wallengren for *rhododactyla*, which is therefore the type.

1862. *OIDEMATOPHORUS*, Wallengren.—Created by Wallengren for *lithodactyla*, which is therefore the type.

1862. *MIMÆSEOPTILUS*, Wallengren.—Created by Wallengren for the "*pterodactyla* (*fuscus*)" and "*bipunctidactyla*" group of Hübner's *Stenoptilia*. The latter was limited by Meyrick in 1890 to the same group, thus making *Mimaeseoptilus* a synonym of *Stenoptilia*.

1862. *LEIOPTILUS*, Wallengren.—Created, in 1862, by Wallengren, for the Leioptilid section of Hübner's *Stenoptilia*. Type now fixed as *tephradactyla*.

1864. *SOCHCHORA*, Walker.—Erected for *donatella*, which is named the type.

1864. *UTUCA*, Walker.—Erected for *ochracealis*, which is named the type.

1880. *TRICHOPTILUS*, Walsingham.—Created by Walsingham for *pygmaeus*, which is therefore the type.

1881. *EUCNEMIDOPHORUS*, Wallengren.—Name created by Wallengren to replace the pre-occupied *Cnaemidophorus*; type, *rhododactyla*.

1881. *PSELNOPHORUS*, Wallengren.—Created by Wallengren for *brachydactyla*, which is therefore the type.

1885. *HEPTALOBA*, Walsingham. — Created for *argyriodactylus*, Walker, which is therefore the type.

1885. *CENOLOBA*, Walsingham.—Created for *obliteralis*, Walker, which is therefore the type.

1886. *MARASMARCHA*, Meyrick.—Created for two species. Type fixed, in 1892, by Tutt as *phaeodactyla*, Hb.(=*lunaedactyla*, Haw.).

1886. *COSMOCLOSTIS*, Meyrick.—Erected for a single species, *aglaodesma*, which is therefore the type.

1886. *SPHENARCHIS*, Meyrick. — Erected for a single species, *synophrys*, which is therefore the type.

1886. *DOXOSTERES*, Meyrick.—Erected for a single species, *aenalis*, Walk., which is therefore the type.

1887. *TETRASCHALIS*, Meyrick.—Erected for *arachnodes*, which is therefore the type.

1890. *GYPSOCHARES*, Meyrick.—Created by Meyrick for *baptodactyla*, which is therefore the type.

1890. *CRASIMETIS*, Meyrick.—Created for *brachydactyla*, which is therefore the type. Sunk by Meyrick, in 1895, as synonymous with *Pselnophorus*.

1891. *ATOMOPTERYX*, Walsingham.—Erected for *doeri*, which is therefore the type.

1891. *UCHYROTICA*, Walsingham.—Erected for *fasciata*, which is therefore the type.

1891. *STEGANODACTYLA*, Walsingham.—Erected for two species, of which *concurra* is noted as the type.

1891. *GILBERTIA*, Walsingham.—Erected for *eques*, which is named the type.

1891. *KARAMAGUIA*, Hampson.—Erected for *auxantidactylus*, which is therefore the type.

1891. *EUROLOBA*, Walsingham.—Created for *fuscicostata*, which is noted as the type.

1896. *CROCYNOSCELUS*, Walsingham.—Created for *ferrugineum*, which is named the type.

(?) *SYNOPHIA*, Pag.—Created for *pyrrha*, which is therefore the type.

As Chapman has already noted, "those who have not examined the Alucitid plumes more than superficially often have the idea that they are a small group of a genus or two, but, though they are a small group as to numbers, they present as much divergence and in nearly as many lines as occurs in the large groups, e.g., Noctuids or Tortricids." This is so true that we have, on biological grounds, had

to use many more names in our review of the subject, and to save duplication we publish the following names used in our work:—

GILLMERIA, n.g., type *ochrodactyla*, Schiff. (*dichrodactyla*, Mühlbg.).

FREDERICINA, n.g., type *calodactyla*, Schiff., Hb. (*zetterstedtii*, Zell.).

CAPPERIA, n.g., type *heterodactyla*, de Vill. (*teucrui*, Jord.).

ADKINIA, n.g., type *bipunctidactyla*, Scop., Haw.

OVENDENIA, n.g., type *septodactyla*, Tr. (*lienigianus*, Zell.).

BUCKLERIA, n.g., type *paludum*, Zell.

ADAINA, n.g., type *microdactyla*, Hb.

HELLINSIA, n.g., type *osteodactylus*, Zell. (*leucadactyla*, Haw.).

EMMELINA, n.g., type *monodactyla*, Linn.

MERRIFIELDIA, n.g., type *tridactyla*, Linné (*tetradactyla*, auct.).

PORRITTIA, n.g., type *galactodactyla*, Schiff.

→ WHEELERIA, n.g., type *spilodactyla*, Curt. ← *See hom. of Wheeleria Focke, 1905*

Temporarily, we suggest that the following is the revised catalogue of British Agdistid and Alucitid plumes. This, of course, excludes the unallied Orneodid moths:—

Superfam.: AGDISTIDES.

Family: AGDISTIDÆ.

Subfam.: AGDISTINÆ.

Tribe: AGDISTIDI.

Adactylus, Curt.

bennetii, Curt.

Superfam.: ALUCITIDES.

Family: PLATYPTILIDÆ.

Subfam.: OXYPTILINÆ.

Tribe: CAPPERIDI.

Capperia, Tutt

heterodactyla, de Vill.

Tribe: OXYPTILIDI.

Oxyptilus, Zell.

pilosella, Zell.

distans, Zell.

parvidactyla, Haw.

Tribe: BUCKLERIDI.

Buckleria, Tutt

paludum, Zell.

Subfam.: PLATYPTILINÆ.

Tribe: PLATYPTILIDI.

Fredericina, Tutt

calodactyla, Schiff.

(*zetterstedtii*, Zell.).

tesseradactyla, Linn.

Platyptilia, Hb.

isodactylus, Zell.

gonodactyla, Schiff.

Gillmeria, Tutt

ochrodactyla, Schiff.

pallidactyla, Haw.

Subfam.: AMBLYPTILINÆ.

Tribe: EUCNÆMIDOPHORIDI.

Eucnæmidophorus,

Wallgrn.

rhododactyla, Schiff.

Tribe: AMBLYPTILIDI.

Amblyptilia, Hb.

cosmodactyla, Hb.

(*acanthodactyla*, Tr.).

punctidactyla, Haw.

Tribe: MARASMARCHIDI.

Marasmarcha, Meyr.

lunædactyla, Haw.

(*phaeodactyla*, Hb.).

Tribe: STENOPTILIDI.

Stenoptilia, Hb.

pterodactyla, Linn.

Adkinia, Tutt

bipunctidactyla, Scop.

zophodactylus, Dup.

Family: ALUCITIDÆ.

Subfam.: OIDÆMATOPHORINÆ.

Tribe: OIDÆMATOPHORIDI.

Oidematophorus,

Wallgrn.

lithodactyla, Tr.

Emmelina, Tutt

monodactyla, Linn.

Subfam.: LEOPTILINÆ.

Tribe: PORRITTIDI.

Porrittia, Tutt

galactodactyla, Schiff.

Tribe: LEOPTILIDI.

Leioptilus, Wallgrn.

tephradactyla, Hb.

Ovendenia, Tutt

septodactyla, Tr.

(*lienigianus*, Zell.).

Tribe: ADAINIDI.

Hellinsia, Tutt

osteodactylus, Zell.

Adaina, Tutt

microdactyla, Hb.

Subfam.: ALUCITINÆ.

Tribe: ALUCITIDI.

Pselnophorus, Wallgrn.

brachydactyla, Tr.

Alucita, Linn.

pentadactyla, Linn.

Subfam.: MERRIFIELDINÆ.

Tribe: MERRIFIELDIDI.

Wheeleria, Tutt

spilodactyla, Curt.

niveidactyla, St. (*balio-*

dactyla, Zell.).

Merrifieldia, Tutt

tridactyla, Linn.

(*tetradactyla*, Auct.).